

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|---|------------------|---------|------------------|
| L1 | 3 | "6,339,774".pn. <i>Remains closest prior patent cited in #20070622</i> | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 17:06 |
| L2 | 14 | ("5123103" "5317727" "5761666" "5857187" "5873085" "5893909" "5918222" "5983220").PN. OR ("6339774").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/12/21 17:18 |
| L3 | 2 | "7143089".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 17:11 |
| L4 | 8 | (L1 or L2 or L3) and ((registration or register\$3 or submit\$4 or submission or input\$4) with (content or information or recipe) with (number or frequenc\$3 or amount or times)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 17:14 |
| L5 | 31 | hiroshi.in. with kutsumi.in. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/12/21 17:20 |
| L6 | 30 | (hiroshi.in. with kutsumi.in.) and content | US-PGPUB; USPAT; USOCR | OR | ON | 2007/12/21 17:20 |
| L7 | 6 | (hiroshi.in. with kutsumi.in.) and (content same recommend\$6) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/12/21 17:21 |
| L8 | 3449 | more near3 content near3 (access\$3 or receiv\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:40 |
| L9 | 393 | (more near3 content near3 (access\$3 or receiv\$3)) and (reward\$3 or incent\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:41 |
| L10 | 2 | ((more near3 contribut\$5) same (more near3 content near3 (access\$3 or receiv\$3))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:41 |

Note: Closest prior art considered 12/02/05 - RHP
 "Recommendation" is in E-Commerce

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|-----|------|---|---|----|----|------------------|
| L11 | 3609 | ((contribut\$4 or regist\$7 or submi\$6) with (content or information)) same ((receiv\$3 or award\$3 or reward\$3) with (incent\$4 or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:43 |
| L12 | 59 | ((((contribut\$4 or regist\$7 or submi\$6) with (content or information)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point))) and (self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:44 |
| L13 | 5 | (reward\$3 or award\$3) with (frequenc\$3 or amount or volume) with (content) with (contribut\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:46 |
| S1 | 2567 | more near3 content near3 (access\$3 or receiv\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:40 |
| S2 | 263 | (more near3 content near3 (access\$3 or receiv\$3)) and (reward\$3 or incent\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:41 |
| S3 | 1 | ((more near3 contribut\$5) same (more near3 content near3 (access\$3 or receiv\$3))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:41 |
| S4 | 124 | (contribut\$5 same (more near5 (access\$3 or receiv\$3))) and (reward\$3 or incent\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/23 20:19 |
| S5 | 0 | "5924072".pn. and ((more adj2 (contribut\$5 or giv\$3)) same (more near5 (access\$3 or receiv\$3))) and (reward\$3 or incent\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/23 20:22 |
| S6 | 26 | ((more adj2 (contribut\$5 or giv\$3)) same (more near5 (access\$3 or receiv\$3))) and (reward\$3 or incent\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/23 20:23 |

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| S7 | 1397 | (redemption or redeem\$3 or trad\$3 or exchang\$3) with point with (content or music or movie or works) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/23 20:29 |
| S8 | 204 | (redemption or redeem\$3 or trad\$3 or exchang\$3) near4 point near4 (content or music or movie or works) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/23 20:31 |
| S9 | 1 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) near4 point near4 (content or music or movie or works)) and (contribut\$5 with (content or review or recipe or criti\$5)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:26 |
| S10 | 2 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) near4 (point or reward) near4 (content or music or movie or works)) and (contribut\$5 with (content or review or recipe or criti\$5)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:28 |
| S11 | 24 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) with (point or reward) with (content or music or movie or works)) and (contribut\$5 with (content or review or recipe or criti\$5)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:32 |
| S12 | 158 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) same (point or reward) same (content or music or movie or works)) and (contribut\$5 with (content or review or recipe or criti\$5)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:40 |
| S13 | 2 | ("6847969".pn. "20020087496".pn.) and (((redemption or redeem\$3 or trad\$3 or exchang\$3) same (point or reward) same (content or music or movie or works)) and (contribut\$5 with (content or review or recipe or criti\$5)))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:49 |
| S14 | 1055 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) same (point or reward) same (content or music or movie or works)) and (content near3 (exchang\$3 or trad\$3 or swap\$4 or contribution)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:51 |

EAST Search History

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| S15 | 289 | ((redemption or redeem\$3 or trad\$3 or exchang\$3) with (point or reward) with (content or music or movie or works)) and (content near3 (exchang\$3 or trad\$3 or swap\$4 or contribution)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/24 08:52 |
| S16 | 3 | "6,339,774".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:00 |
| S17 | 0 | "6,339,774".pn. and (redemption or redeem\$3 or trad\$3 or exchang\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 16:38 |
| S18 | 1 | "6,339,774".pn. and (register\$6 with content) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 16:38 |
| S19 | 13 | ("5123103" "5317727" "5761666" "5857187" "5873085" "5893909" "5918222" "5983220").PN. OR ("6339774").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 18:00 |
| S20 | 7 | (self-replicat\$4 or self-generat\$3) with (content or information) with (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:45 |
| S21 | 32 | "6,193,518".pn. or ((self-replicat\$4 or self-generat\$3) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3)) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:47 |
| S22 | 0 | "6,193,518".pn. and ((self-replicat\$4 or self-generat\$3) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3)) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:46 |
| S23 | 30 | ("6,193,518".pn. or ((self-replicat\$4 or self-generat\$3) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3))) and (point or reward\$3 or rede\$7 or exchang\$3 or trad\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:50 |

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| S24 | 37 | ("6,193,518".pn. or ((self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3))) and (point or reward\$3 or rede\$7 or exchang\$3 or trad\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:52 |
| S25 | 36 | ((self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3))) and (point or reward\$3 or rede\$7 or exchang\$3 or trad\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 16:53 |
| S26 | 36 | ((self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3))) and (point or reward\$3 or rede\$7 or exchang\$3 or trad\$3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 16:54 |
| S27 | 45 | ((self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) same (content or information) same (database or data-base or datastore or data-store or (data adj (base or store)) or repositor\$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 16:54 |
| S28 | 1 | "6,339,774".pn. and (content) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:01 |
| S29 | 1 | "6,339,774".pn. and (content same (incent\$4 or motivat\$4 or compel\$5 or reward\$3)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:02 |
| S30 | 1 | "6,339,774".pn. and ((content or information) same (incent\$4 or motivat\$4 or compel\$5 or reward\$3)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:01 |
| S31 | 1 | "6,339,774".pn. and (incent\$4 or motivat\$4 or compel\$5 or reward\$3 or point) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:09 |

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| S32 | 1 | "6,339,774".pn. and (merit) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:12 |
| S33 | 0 | "6,339,774".pn. and ((merit or point) same (trad\$3 or cashed or reward\$3 or award\$3 or exchang\$3 or rede\$5)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:11 |
| S34 | 1 | "6,339,774".pn. and (frequenc\$3 with (contribut\$4 or regist\$8)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:46 |
| S35 | 1 | "6,339,774".pn. and ((frequenc\$3 with (contribut\$4 or regist\$8)) same (point or content or information or merit)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 17:06 |
| S36 | 1 | "6,339,774".pn. and ((frequenc\$3) same (point or content or information or merit)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:14 |
| S37 | 1 | "6,339,774".pn. and ((frequenc\$3)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 17:14 |
| S38 | 3126 | ((contribut4 or regist\$7 or submi\$6) with (content or information)) same ((receiv\$3 or award\$3 or reward\$3) with (incent\$4 or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:43 |
| S39 | 4511 | ((contribut4 or regist\$7 or submi\$6) with (content or information)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:03 |
| S40 | 4689 | ((contribut\$4 or regist\$7 or submi\$6) with (content or information)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:04 |

EAST Search History

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| S41 | 48 | ((contribut\$4 or regist\$7 or submi\$6) with (content or information)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point))) and (self-replicat\$4 or self-generat\$3 or (self adj (generat\$3 or replicat\$4))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 18:43 |
| S42 | 61 | ((contribut\$4 or regist\$7 or submi\$6) with (content or information)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point))) and (self-sustain\$3 or self-replicat\$4 or self-generat\$3 or (self adj (sustain\$3 or generat\$3 or replicat\$4))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:14 |
| S43 | 6 | ("20020059228" "20030018659" "20030204536" "20040019846" "20050119922" "6076101").PN. OR ("7065536").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 18:24 |
| S44 | 1 | "6076101".pn. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 18:11 |
| S45 | 0 | ((contribut\$4 or regist\$7 or submi\$6) with (recipe)) with ((receiv\$3 or award\$3 or reward\$3) with (additional or more or incent\$4 or merit or point))) and (self-sustain\$3 or self-replicat\$4 or self-generat\$3 or (self adj (sustain\$3 or generat\$3 or replicat\$4))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:15 |
| S46 | 5194 | (recipe with (receiv\$3 or award\$3 or reward\$3 or additional or more or incent\$4 or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:15 |
| S47 | 6 | recipe with (award\$3 or reward\$3) with (content or additional or merit or point) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:18 |
| S48 | 12683 | (recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:20 |
| S49 | 12683 | (recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:21 |

EAST Search History

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| S50 | 8605 | ((recipe or content or knowledge) with ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:21 |
| S51 | 1942 | ((recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point))).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:24 |
| S52 | 1 | "7065536".pn. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/29 18:24 |
| S53 | 50 | "707"/\$.ccls. and ((recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point))).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:28 |
| S54 | 44 | "705"/\$.ccls. and ((recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point))).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:30 |
| S55 | 1 | "20020010621".pn. and "705"/\$.ccls. and ((recipe or content or knowledge) same ((award\$3 or reward\$3 or receiv\$3) with (((additional or more) near3 (content or receipe or knowledge)) or merit or point))).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:31 |
| S56 | 18638 | ((recipe or content or knowledge) near5 consum\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:32 |
| S57 | 6298 | "705"/\$.ccls. and ((recipe or content or knowledge or information) near5 consum\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:32 |
| S58 | 1378 | "705"/\$.ccls. and (((recipe or content or knowledge or information) near5 consum\$5) same (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:34 |

EAST Search History

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| S59 | 708 | "705"/\$.ccls. and (((recipe or content or knowledge or information) near5 consum\$5) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:55 |
| S60 | 63 | "705"/\$.ccls. and (((recipe or content or knowledge or information) near5 consum\$5) with (reward\$3 or award\$3 or incent\$4 or issu\$3) with (merit or point or merit-based or point-based or points-based)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:37 |
| S61 | 115 | "705"/\$.ccls. and (((recipe or content or knowledge or information) with (frequenc\$3 or consum\$5)) with (reward\$3 or award\$3 or incent\$4 or issu\$3) with (merit or point or merit-based or point-based or points-based)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:44 |
| S62 | 143 | "705"/\$.ccls. and (((recipe or content or knowledge or information) with (frequenc\$3 or consum\$5)) with (reward\$3 or award\$3 or incent\$4 or issu\$3) with (prize or merit or point or merit-based or point-based or points-based)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:50 |
| S63 | 2 | "5,915,243".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:50 |
| S64 | 42 | ("5915243").URPN. | USPAT | OR | ON | 2007/01/29 18:51 |
| S65 | 873 | ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (recipe or content or knowledge or information)) same (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 18:59 |
| S66 | 793 | ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (recipe or content or knowledge or information)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:02 |

EAST Search History

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| S67 | 16 | "200005668".pn. or ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (recipe)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:04 |
| S68 | 12 | ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (recipe)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:07 |
| S69 | 205 | "5970469".pn. or ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (content)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:12 |
| S70 | 3 | ("5970469".pn. or "5924072".pn. or "6339774".pn. or "7054830".pn.) and ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (content)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:18 |
| S72 | 5 | ("5970469".pn. or "5924072".pn. or "6339774".pn. or "7054830".pn. or "7143089".pn. or "20010051996".pn.) and ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (content)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/29 19:32 |

EAST Search History

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|-----|----|--|---|----|----|------------------|
| S73 | 4 | ("5970469".pn. or "5924072".pn. or "6339774".pn. or "7054830".pn. or "7143089".pn.) and ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) with (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) with (content)) with (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 09:14 |
| S74 | 1 | "7143089".pn. and ((incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5) same (consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3) same (content)) same (reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 16:10 |
| S75 | 21 | ("5625767" "5835087" "5924072" "5948054" "5974412" "6006218" "6012053" "6018619" "6026388" "6088692" "6115709" "6154811" "6167395" "6208998" "6266668" "6330576" "6377949" "6405197" "6421669" "6523026" "6618727"). PN. OR ("7143089").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/01/30 09:17 |
| S77 | 1 | "7143089".pn. and (incent\$4 or motivat\$4 or compel\$6 or encourag\$5 or induc\$5 or consum\$5 or contribut\$4 or regist\$6 or submit\$5 or post\$3 or publish\$3 or reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:41 |
| S78 | 1 | "7143089".pn. and ((earn\$3 or reward\$3 or award\$3 or incent\$4 or merit or point or merit-based or point-based or points-based) same (cash or prize or merchandise or value or additional or content or contribut\$4 or goods or coupon or credit\$3 or redeem\$3 or redemption or trad\$3 or exchang\$3 or swap\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 10:06 |
| S80 | 2 | "7130817".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 11:24 |

EAST Search History

| | | | | | | |
|-----|---|--|---|----|----|------------------|
| S81 | 0 | "20020138363".pn. and (customized same portion same changing same status) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 11:25 |
| S82 | 0 | "20020138363".pn. and (changing same status) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 11:25 |
| S83 | 0 | "20020138363".pn. and (status) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 11:25 |
| S84 | 2 | "20020138363".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 15:29 |
| S85 | 1 | "7143089".pn. and (bonus or double or triple or twice or three or times or greater or (more adj than)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 08:49 |
| S86 | 0 | "7143089".pn. and (recipe) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 16:47 |
| S87 | 1 | "7143089".pn. and (cook\$3 or menu or recipe or ingredient or restaurant) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:34 |
| S88 | 1 | "7143089".pn. and (guest) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:36 |
| S89 | 1 | "7143089".pn. and (guest or contributor) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:39 |
| S90 | 1 | "7143089".pn. and (additional\$3 with (access or content)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:40 |

EAST Search History

| | | | | | | |
|-----|------|---|---|----|----|------------------|
| S91 | 1 | "7143089".pn. and ((additional\$3 or free\$2) with (access or content)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:40 |
| S92 | 2 | "7143089".pn. and ((guest or contribut\$3 or user or member) same (incent\$4 or reward\$3 or award\$3 or merit or point or earn\$3 or cash or prize or content)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 17:43 |
| S93 | 1 | "7143089".pn. and ((guest or contribut\$3 or user or member) same (incent\$4 or reward\$3 or award\$3 or merit or point or earn\$3 or cash or prize)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 18:01 |
| S94 | 3 | ("7143089".pn. "6,339,774".pn.) and (histor\$6 or past or previous\$3 or profile) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 18:08 |
| S95 | 1 | ("7143089".pn. "6,339,774".pn.) and (fee or fee-based) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 18:10 |
| S96 | 2 | ("7143089".pn. "6,339,774".pn.) and (fee or fee-based or pay\$5 or dues or charg\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/30 18:11 |
| S97 | 1 | "7143089".pn. and ((register\$3 or contribut\$4 or submit\$5) with (content or review or rating or comment or opinion)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 08:54 |
| S98 | 1 | "7143089".pn. and (((register\$3 or contribut\$4 or submit\$5) with (content or review or rating or comment or opinion)) same (bonus or point or merit or incentive or prize or cash or money or value or merchandise)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 09:33 |
| S99 | 6315 | 705/26-27.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 09:33 |

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|----------|----|--|---|----|----|------------------|
| S10 0 | 0 | 705/26-27.ccls. and ((contribute or contributed or contributing) with (recipe)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 09:34 |
| S10 1 | 30 | 705/26-27.ccls. and ((contribute or contributed or contributing) with (content or recipe)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 09:34 |
| S10 2 | 6 | 705/26-27.ccls. and (((contribute or contributed or contributing) with (content or recipe)) same (incentive or bonus or prize or award\$3 or reward\$3 or earn\$3 or point or point-based or points-based or merit or merit-based or value)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/01/31 09:37 |
| S10 3 | 2 | "20010044759".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/12/21 16:16 |

Author Search update

12/21/07

Logon

*** It is now 12/21/07 5:02:38 PM ***

Welcome to DialogLink - Version 5 Revolutionize the Way You Work!

New on Dialog

New Chinese Patent Data in Derwent World Patents Index

Effective November 1, 2007, English-language translations for Chinese Utility Model registrations are now available in *Derwent World Patents Index First View on Dialog* (File 331) and *Derwent World Patents Index (DWPI)* (File 350, 351,352), beginning with records published on October 3, 2007.

All Chinese Utility Model registration records in *Derwent World Patents Index First View*SM feature:

- Bibliographic fields including patent number, filing date, IPCs, inventor and assignee names
- Patentee code
- English translation of the author's title, abstract and first claim (all records are human translated)

The Utility numbers will be formatted as follows:

CN20NNNNNNNY

20 = IP right (indicating a utility model) followed by 7-digit serial no. Utility Models have the status Y

DialogLink 5 Release Notes

New features available in the latest release of DialogLink 5 (August 2006)

- Ability to resize images for easier incorporation into DialogLink Reports
- New settings allow users to be prompted to save Dialog search sessions in the format of their choice (Microsoft Word, RTF, PDF, HTML, or TEXT)
- Ability to set up Dialog Alerts by Chemical Structures and the addition of Index Chemicus as a structure searchable database
- Support for connections to STN Germany and STN Japan services

Show Preferences for details

? Help Off Line

* * *

Connecting to Rob Pond - Dialog - 264751

Connected to Dialog via SMS0032611052

? B 15, 9, 610, 810, 275, 476, 624, 621, 636, 613, 813, 16, 160, 634, 148, 20, 35, 583, 65, 2, 474, 475, 99, 256, 348, 349, 347, 635, 570, PAPERSMJ, PAPERSEU, 47

[File 15] **ABI/Inform(R)** 1971-2007/Dec 20

(c) 2007 ProQuest Info&Learning. All rights reserved.

[File 9] **Business & Industry(R)** Jul/1994-2007/Dec 14

(c) 2007 The Gale Group. All rights reserved.

[File 610] **Business Wire** 1999-2007/Dec 21

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**File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.*

[File 810] **Business Wire** 1986-1999/Feb 28

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[File 275] **Gale Group Computer DB(TM)** 1983-2007/Dec 18

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[File 624] **McGraw-Hill Publications** 1985-2007/Dec 21

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**File 624: Homeland Security & Defense and 9 Platt energy journals added Please see HELP NEWS624 for more*

[File 621] **Gale Group New Prod.Annou.(R)** 1985-2007/Dec 13

(c) 2007 The Gale Group. All rights reserved.

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/Dec 20

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[File 613] **PR Newswire** 1999-2007/Dec 21

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**File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.*

[File 813] **PR Newswire** 1987-1999/Apr 30

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[File 16] **Gale Group PROMT(R)** 1990-2007/Dec 18

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[File 160] **Gale Group PROMT(R)** 1972-1989

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[File 634] **San Jose Mercury** Jun 1985-2007/Dec 19
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[File 148] **Gale Group Trade & Industry DB** 1976-2007/Dec 12
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[File 20] **Dialog Global Reporter** 1997-2007/Dec 20
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[File 65] **Inside Conferences** 1993-2007/Dec 19
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[File 2] **INSPEC** 1898-2007/Dec W2
(c) 2007 Institution of Electrical Engineers. All rights reserved.

[File 474] **New York Times Abs** 1969-2007/Dec 20
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[File 475] **Wall Street Journal Abs** 1973-2007/Dec 21
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[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2007/Oct
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[File 256] **TecInfoSource** 82-2007/Jul
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[File 348] **EUROPEAN PATENTS** 1978-2007/ 200751
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[File 349] **PCT FULLTEXT** 1979-2007/UB=20071213UT=20071106
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[File 347] **JAPIO** Dec 1976-2007/Jun(Updated 070926)
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[File 635] **Business Dateline(R)** 1985-2007/Dec 21
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[File 471] **New York Times Fulltext** 1980-2007/Dec 22

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[File 492] **Arizona Repub/Phoenix Gaz** 1986-2002/Jan 06

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**File 492: File 492 is closed (no longer updating). Use Newsroom, Files 989 and 990, for current records.*

[File 494] **St LouisPost-Dispatch** 1988-2007/Dec 20

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[File 631] **Boston Globe** 1980-2007/Dec 21

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[File 633] **Phil.Inquirer** 1983-2007/Dec 21

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[File 638] **Newsday/New York Newsday** 1987-2007/Dec 20

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[File 640] **San Francisco Chronicle** 1988-2007/Dec 19

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[File 641] **Rocky Mountain News** Jun 1989-2007/Dec 21

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[File 702] **Miami Herald** 1983-2007/Dec 16

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[File 704] **(Portland)The Oregonian** 1989-2007/Dec 18

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[File 710] **Times/Sun.Times(London)** Jun 1988-2007/Dec 21

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[File 711] **Independent(London)** Sep 1988-2006/Dec 12

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**File 711: Use File 757 for full current day's news of the Independent, as as well as full coverage of many additional European news sources.*

[File 756] **Daily/Sunday Telegraph** 2000-2007/Dec 21
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[File 757] **Mirror Publications/Independent Newspapers** 2000-2007/Dec 21
(c) 2007. All rights reserved.

[File 47] **Gale Group Magazine DB(TM)** 1959-2007/Dec 19
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? S AU=(kutsumi H? OR kutsumi H? OR (hiroshi(2N)kutsumi))

>>>W: One or more prefixes are unsupported

or undefined in one or more files.

135 AU=KUTSUMI H?

135 AU=KUTSUMI H?

38190 AU=HIROSHI

48 AU=KUTSUMI

39 AU=HIROSHI(2N)AU=KUTSUMI

S1 135 S AU=(KUTSUMI H? OR KUTSUMI H? OR (HIROSHI(2N)KUTSUMI))

? S AU=(araki S? OR araki S? OR (shouichi(2N)araki))

>>>W: One or more prefixes are unsupported

or undefined in one or more files.

2926 AU=ARAKI S?

2926 AU=ARAKI S?

344 AU=SHOUICHI

1828 AU=ARAKI

18 AU=SHOUICHI(2N)AU=ARAKI

S2 2926 S AU=(ARAKI S? OR ARAKI S? OR (SHOUICHI(2N)ARAKI))

? S AU=(Naito e? OR Naito e? OR (eiichi(2N)Naito))

>>>W: One or more prefixes are unsupported

or undefined in one or more files.

120 AU=NAITO E?

```

120    AU=NAITO E?
2953   AU=EIICHI
1786   AU=NAITO
21     AU=EIICHI(2N)AU=NAITO
S3     120   S AU=(NAITO E? OR NAITO E? OR (EIICHI(2N)NAITO))

?  S AU=(hiratsuka t? OR hiratsuka t? OR (tomoyasu(2N)hiratsuka))
>>>W: One or more prefixes are unsupported
or undefined in one or more files.

547    AU=HIRATSUKA T?
547    AU=HIRATSUKA T?
527    AU=TOMOYASU
358    AU=HIRATSUKA
1      AU=TOMOYASU(2N)AU=HIRATSUKA
S4     547   S AU=(HIRATSUKA T? OR HIRATSUKA T? OR (TOMOYASU(2N)HIRATSUKA))

?  S AU=(jitousho y? OR jitousho y? OR (Yuumi(2N)jitousho))
>>>W: One or more prefixes are unsupported
or undefined in one or more files.

1      AU=JITOUSHO Y?
1      AU=JITOUSHO Y?
4      AU=YUUMI
4      AU=JITOUSHO
1      AU=YUUMI(2N)AU=JITOUSHO
S5     1     S AU=(JITOUSHO Y? OR JITOUSHO Y? OR (YUUMI(2N)JITOUSHO))

?  s s1 or s2 or s3 or s4 or s5
135    S1
2926   S2
120    S3
547    S4
1      S5
S6     3671  S S1 OR S2 OR S3 OR S4 OR S5

```

? s S6 and (content or information or recipe) and (recommend??? or recommendation or register??? or registration)

Processing

Processing

| | |
|----------|----------------|
| 3671 | S6 |
| 5912945 | CONTENT |
| 40657668 | INFORMATION |
| 457660 | RECIPE |
| 3505124 | RECOMMEND??? |
| 1011388 | RECOMMENDATION |
| 7159323 | REGISTER??? |
| 2100077 | REGISTRATION |

S7 90 S S6 AND (CONTENT OR INFORMATION OR RECIPE) AND (RECOMMEND??? OR RECOMMENDATION OR REGISTER??? OR REGISTRATION)

? rd

>>>W: Duplicate detection is not supported for File 348.

Duplicate detection is not supported for File 349.

Duplicate detection is not supported for File 347.

Records from unsupported files will be retained in the RD set.

S8 90 RD (UNIQUE ITEMS)

? t s/free/all

>>>E: is not a set number

? t s8/free/all

>>>W: "FREE" is not a valid format name in file(s): 347-349

? S S6 AND ((CONTENT OR INFORMATION OR RECIPE)(5n)(RECOMMEND??? OR RECOMMENDATION OR REGISTER??? OR REGISTRATION))

Processing

Processing

Processing

Processing

Processing

Processing

Processing

3671 S6

5912945 CONTENT

40657668 INFORMATION

457660 RECIPE

3505124 RECOMMEND???

1011388 RECOMMENDATION

7159323 REGISTER???

2100077 REGISTRATION

440423 ((CONTENT OR INFORMATION) OR RECIPE)(5N)((RECOMMEND???

RECOMMENDATION) OR REGISTER???) OR REGISTRATION)

S9 31 S S6 AND ((CONTENT OR INFORMATION OR RECIPE)(5N)(RECOMMEND???

RECOMMENDATION OR REGISTER???

OR REGISTRATION))

? t s9/k/all

9/K/1 (Item 1 from file: 348)

EUROPEAN PATENTS

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Inventor:

• KUTSUMI, Hiroshi

... ..JP); ;

• ARAKI, Shouichi

; ;

| Country | Number | Kind | Date | | |
|----------------------------------|--------|-----------|------|--------|------------|
| Type | | Pub. Date | | Kind | Text |
| Available Text | | Language | | Update | Word Count |
| Total Word Count (Document A) | | | | | |
| Total Word Count (Document B) | | | | | |
| Total Word Count (All Documents) | | | | | |

Specification: ...user's behavior, in particular, a method to utilize mobile log data for marketing or **information recommendation** has been conventionally suggested. For example, there is a method for recording a user's... ..the network, for marketing research such as analysis of the user's preference or a **content recommendation** service.

Also, a context aware service which provides a service according to the context, using...

Inventor:

- ...JP)
 ; ;
- ARAKI, Shoji...
 ; ;

| Country | Number | Kind | Date | |
|----------------------------------|--------|-----------|--------|------------|
| Type | | Pub. Date | Kind | Text |
| Available Text | | Language | Update | Word Count |
| Total Word Count (Document A) | | | | |
| Total Word Count (Document B) | | | | |
| Total Word Count (All Documents) | | | | |

Specification: ...fifth address, second request means for requesting a sixth address predicted by the first other **information** processing apparatus and **registered** in the third other **information** processing apparatus, the sixth address being an address on the second network of the first... Step S174 of Fig. 15) for requesting a sixth address predicted by the first other **information** processing apparatus and **registered** in the third other **information** processing apparatus, the sixth address being an address on the second network of the first... ...in Claim 17 of Claims is characterized by including acquisition means (e.g., a user **registration information** management processing unit 155 of Fig. 5 for executing the process at Step S 193... ...and predicted by the first other information processing apparatus, storage means (e.g., a user **registration information** database 177 of Fig. 5) for storing the information of the address on the network... ...information processing apparatus acquired by the acquisition means, and supply means (e.g., the user **registration information** management processing unit 155 of Fig. 5 for executing the process at Step S196 of...process regarding authentication of a user to be provided with the IM service. A user **registration information** management processing unit 155 has therein a control unit, a calculation unit or a data storage unit (each not shown) and executes a process regarding management of user **registration information** supplied from the local communication apparatus and **registered** in a user **registration information** database 177.

CPU 151, ROM 152, RAM 153, authentication processing unit 154 and user **registration information** management processing unit 155 are interconnected by a bus 160. An input/output interface 170... ...a semiconductor memory.

The input/output interface 170 is also connected to a user authentication **information** database 176 and a user **registration information** database 177, the former storing user authentication information to be used by the authentication process to be executed by the authentication processing unit 154 and the latter storing user **registration information** which is **information** of each user regarding the IM service.

Fig. 6 is a block diagram showing an... ...that the user authentication information database 176 stores the user authentication information. The user authentication **information** database 176 **registers** in proceed user authentication **information** 261 in correspondence with user IDs and user passwords. The authentication processing unit 154 refers to the pre-**registered** user authentication **information** 261 and compares the acquired user authentication information to judge whether the user is a... ...the communication information request from the local communication apparatus 11 or 31 updates the user **registration information** **registered** in proceed in the user **registration information** database 176, by using the global address port information of the relay apparatus 12 or...

...acquired the communication source address port information from the local communication apparatus 11 or 31 **registers** the communication source address port **information** in the user **registration information** database 177, as will be later described. At Step S31 the user service providing apparatus 41 supplies communication **information** of a communication destination **registered** in the user **registration information** database 177 to the local communication information apparatus 11 or 31 via the network 21...registration of the predicted global address port information of the communication source as the user **registration information**. This process corresponds to the process at Step S9 of Fig. 9.

The user service... ...registration of the predicted global address port information of the communication source updates the user **registration information** based on the request, and supplies the communication information of the communication destination, which is... ...the local communication apparatus 11 via the network 21, based on the updated latest user **registration information**.

At Step S 181 the communication information acquisition processing unit 65 of the local communication... ...made when necessary with reference to Fig. 19.

First, at Step S 191 the user **registration information** management processing unit 155 of the user service providing apparatus 41 controls the communication unit... ...judged that the request for communication information has been acquired, at Step S192 the user **registration information** management processing unit 155 updates the communication destination global address port **information** in the user **registration information** stored in the user **registration information** database 177 such as shown in Fig. 19 and corresponding to the communication information request source.

As shown in Fig. 19, the user **registration information** 310 **registered** in the user **registration information** database 177 includes a user ID 311, predicted communication source global address port information (predicted... ...partner side desired by the user corresponding to the user ID 311 of the user **registration information**, whereas the predicted communication source global address port information 312 is the global address port information of the user side corresponding to the user ID 311 of the user **registration information**.

For example, if the user ID of a user of the local communication apparatus 11... ...to the user ID "AAA-usr", and an instruction "predicted communication source global address port **information** of BBB-usr" is **registered** in a predicted communication destination global address port 313 corresponding to the user ID "AAA... ...communication partner is not designated, "(none)" is registered in the communication destination global address port **information** 313 in the user **registration information** of the user.

As described above, in the process at Step S 192 the user **registration information** management processing unit 155 updates the communication global address port **information** 313 contained in the user **registration information** 310. The process corresponds to the process at Step S27 of Fig. 7.

Thereafter, the... ...S 180 of Fig. 15.

Reverting to Fig. 18, at Step S 193 the user **registration information** management processing unit 155 controls the communication unit 174 to judge whether the request for... ...If it is judged that the request has been acquired, at Step S194 the user **registration information** management processing unit 155 updates the communication source global address port **information** of the user **registration information** corresponding to the user requested the registration of the communication source global address information, at Step S 195 based on the instruction registered in the communication destination global address port **information** 313 of the user **registration information** of the user, acquires the user **registration information** of the communication destination from the user **registration information** database 177, and at Step S 196 supplies the communication information of the communication destination... ...correspond to Steps S30 and S31 of Fig. 9.

At Step S 197, the user **registration information** management processing unit 155 supplied the communication information judges whether the information providing process is... ...S 197 that the information providing process is

terminated, at Step S 198 the user **registration information** management processing unit 155 executes an end process to terminate the information providing process.

If... ..registration of the communication source global address port information has not been acquired, the user **registration information** management processing unit 155 proceeds the process to Step S 199 whereat an error process...

Claims: ...apparatus;

a second request means for requesting a sixth address predicted by the first other **information** processing apparatus and **registered** in the third other **information** processing apparatus, the sixth address being an address on the second network of the first...

9/K/3 (Item 3 from file: 348)

EUROPEAN PATENTS

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Inventor:

• ...JP)

;;

• ARAKI, Satoshi, Ishihara Sangyo Kaisha, Ltd...

;;

| Country | | Number | | Kind | Date | |
|----------------------------------|--|--------|--|-----------|--------|------------|
| Type | | | | Pub. Date | Kind | Text |
| Available Text | | | | Language | Update | Word Count |
| Total Word Count (Document A) | | | | | | |
| Total Word Count (Document B) | | | | | | |
| Total Word Count (All Documents) | | | | | | |

Specification: ...Os3RmybA1 and the putative amino acid sequence (SEQ ID NO: 49) presumed from the genome **information** data **registered** with ACCESSION NO: BAB78687 on DDBJ (DNA Data Bank of Japan) are optimally aligned, it...

9/K/4 (Item 4 from file: 348)

EUROPEAN PATENTS

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Inventor:

• ...JP)

;;

• NAITO, Eiichi

;;

| <u>Country</u> | <u>Number</u> | <u>Kind</u> | <u>Date</u> | | |
|----------------------------------|---------------|------------------|-------------|---------------|-------------------|
| Type | | Pub. Date | | Kind | Text |
| Available Text | | Language | | Update | Word Count |
| Total Word Count (Document A) | | | | | |
| Total Word Count (Document B) | | | | | |
| Total Word Count (All Documents) | | | | | |

Specification: ...For example, there are known an information distribution system in which area-to-area advertisement **information registered** in advance is read based on position information acquired from a GPS-mounted mobile phone...service concierge 25, to allow digital signature of the service provider on the display-conditioned **information**. <Registration of mobile terminal>

The processing of registering the mobile terminal 11 with the movement...

9/K/5 (Item 5 from file: 348)

EUROPEAN PATENTS

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Inventor:

• NAITO, Eiichi

;;

| <u>Country</u> | <u>Number</u> | <u>Kind</u> | <u>Date</u> | | |
|----------------------------------|---------------|------------------|-------------|---------------|-------------------|
| Type | | Pub. Date | | Kind | Text |
| Available Text | | Language | | Update | Word Count |
| Total Word Count (Document A) | | | | | |
| Total Word Count (Document B) | | | | | |
| Total Word Count (All Documents) | | | | | |

Specification: ...reference numeral 110 denotes a server for accumulating and distributing a plurality of contents as **recommendation information** to be provided. Reference numeral 100 denotes a communication network represented by the Internet. Reference... ...example of a terminal apparatus for acquiring a content from the server 110 and presenting (**recommending**) the **content** to a user. Reference numeral 150 denotes a car navigation device which has the function...

9/K/6 (Item 6 from file: 348)

EUROPEAN PATENTS

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| | | | | | |
|----------------------------------|--------|-----------|------|--------|------------|
| Country | Number | Kind | Date | | |
| Type | | Pub. Date | | Kind | Text |
| Available Text | | Language | | Update | Word Count |
| Total Word Count (Document A) | | | | | |
| Total Word Count (Document B) | | | | | |
| Total Word Count (All Documents) | | | | | |

Specification: ...actual situations.

The 1st invention of the present invention (corresponding to claim 1) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..said Internet.

The 2nd invention of the present invention (corresponding to claim 2) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition...and impressions.

The 3rd invention of the present invention (corresponding to claim 3) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..said contents.

The 4th invention of the present invention (corresponding to claim 4) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..by words.

The 5th invention of the present invention (corresponding to claim 5) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..are output by output means, and

the number of times a user attempting to receive **recommendation** receives **recommendation** or the **content** of the **recommendation** is determined depending on the number of times said user carried out **registration** by using said **content registration** means.

The 6th invention of the present invention (corresponding to claim 6) is an **information recommendation** apparatus according to 5th invention, wherein the number of registration times of said user is... ..user ID.

The 7th invention of the present invention (corresponding to claim 7) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..said conditions.

The 8th invention of the present invention (corresponding to claim 8) is an **information recommendation** apparatus according to 7th invention, wherein the conditions to be input to said condition input... ..receive recommendation.

The 9th invention of the present invention (corresponding to claim 9) is an **information recommendation** apparatus according to 7th invention, wherein the characteristic of each item of said user is... ..said data.

The 10th invention of the present invention (corresponding to claim 10) is an **information recommendation** apparatus according to 7th invention, wherein the conditions to be input to said condition input... ..said user.

The 11th invention of the present invention (corresponding to claim 11) is an **information recommendation** apparatus according to 10th invention, wherein the characteristic of each item of said user is... ..the contents.

The 12th invention of the present invention (corresponding to claim 12) is an **information recommendation** apparatus according to 8th or 10th inventions, wherein, when said conditions are extracted from said... ..are extracted.

The 13th invention of the present invention (corresponding to claim 13) is an **information recommendation** apparatus according to 7th invention, wherein said condition input means inputs said externally input conditions... ..selected contents.

The 14th invention of the present invention (corresponding to claim 14) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition...and storing said characteristic information obtains said characteristic information by calculation and stores said characteristic **information**, and

in the case of **recommendation** to a specific user, said recommendation means specifies other users whose characteristic information is coincident or similar to said characteristic information of said specific user by using said stored characteristic **information**, and selects and **recommends** contents **registered** in the past by said other users, contents recommended to said other users or contents... ..other users.

The 15th invention of the present invention (corresponding to claim 15) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending recipes coincident with or similar to conditions input by condition... ..recipe groups for dishes taken for a meal, and

when said conditions are input, said **recommendation** means determines a **recipe** coincident with or most similar to said conditions, and selects and determines all or part... ..determined recipe.

The 16th invention of the present invention (corresponding to claim 16) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..type information, and

type judgment means judges the type of said user attempting to receive **recommendation** by comparing said characteristic **information** of said user attempting to receive **recommendation** with said type **information**.

The 17th invention of the present invention (corresponding to claim 17) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..specifying means.

The 18th invention of the present invention (corresponding to claim 18) is an **information recommendation** apparatus comprising:

recommendation means of selecting and recommending contents coincident with or similar to conditions input by condition... ..specifying means.

The 19th invention of the present invention (corresponding to claim 19) is an **information recommendation** apparatus according to 17th or 18th inventions, wherein

the number of times said advertisement is... ..advertisement counter.

The 20th invention of the present invention (corresponding to claim 20) is an **information recommendation** apparatus according to one of 1st to 6th and 13th to 19th inventions, wherein said... ..dimensional interface.

The 21st invention of the present invention (corresponding to claim 21) is an **information recommendation** apparatus according to one of 1st to 19th inventions, wherein said recommendation means does not... ..user again.

The 22nd invention of the present invention (corresponding to claim 22) is an **information recommendation** apparatus according to one of 1st, 2nd, 5th to 19th inventions, wherein said recommendation means... ..content database.

The 23rd invention of the present invention (corresponding to claim 23) is an **information recommendation** apparatus comprising:

from among contents formed of plural pieces of data having plural items and... ..to said characteristic information of said user having said user ID by using said characteristic **information**, and of selecting and **recommending** only the contents not recommended to said user having said user ID or only the... ..said user.

The 24th invention of the present invention (corresponding to claim 24) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values via... ..said Internet.

The 25th invention of the present invention (corresponding to claim 25) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;

recommendation... ..and impressions.

The 26th invention of the present invention (corresponding to claim 26) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;
recommendation... ..said contents.

The 27th invention of the present invention (corresponding to claim 27) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;
recommendation... ..by words.

The 28th invention of the present invention (corresponding to claim 28) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;
recommendation... ..of outputting said recommended contents, wherein

the number of times a user attempting to receive **recommendation** receives **recommendation** or the **content** of the **recommendation** is determined depending on the number of times said user carried out **registration** by using said **content registration** means.

The 29th invention of the present invention (corresponding to claim 29) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;
recommendation... ..extraction means.

The 30th invention of the present invention (corresponding to claim 30) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;
recommendation... ..or similar to said input conditions from said content database;
output means of outputting said **recommended** contents; and

characteristic **information** calculation means of obtaining characteristic information by calculation for each of said items and storing said characteristic **information** on the basis of contents **registered** in the past by a user attempting to receive recommendation, contents recommended to said user... ...or similar to said characteristic information of said specific user by using said stored characteristic **information**, and selects and **recommends** contents **registered** in the past by said other users, contents recommended to said other users or contents... ...other users.

The 31st invention of the present invention (corresponding to claim 31) is an **information recommendation** system comprising:

a **content** database for storing recipes formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said recipes in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;

recommendation... ...similar to said input conditions from said content database; and

output means of outputting said **recommended** contents, wherein

said **content** database is classified into recipe groups for dishes taken for a meal, and

when said conditions are input, said **recommendation** means determines a **recipe** coincident with or most similar to said conditions, and selects and determines all or part... ...determined recipe.

The 32nd invention of the present invention (corresponding to claim 32) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined item and attribute values;

recommendation... ...or similar to said input conditions from said content database;

output means of outputting said **recommended** contents;

characteristic **information** calculation means of obtaining characteristic information by calculation for each of said items and storing said characteristic **information** on the basis of contents **registered** in the past by a user attempting to receive recommendation, contents recommended to said user... ...input; and

type judgment means of judging the type of said user attempting to receive **recommendation** by comparing said characteristic **information** of said user with said type information.

The 33rd invention of the present invention (corresponding to claim 33) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;

recommendation... ...advertisement database.

The 34th invention of the present invention (corresponding to claim 34) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

condition input means of inputting conditions represented by predetermined items and attribute values;

recommendation... ..advertisement database.

The 35th invention of the present invention (corresponding to claim 35) is an **information recommendation** system comprising:

a **content** database for storing contents formed of plural pieces of data having plural items and attribute values corresponding thereto;

content registration means of **registering** said contents in said **content** database;

characteristic information calculation means of obtaining characteristic information by calculation for each of said items and storing said characteristic **information** on the basis of contents **registered** in the past by a user attempting to receive recommendation, contents recommended to said user... ..to said characteristic information to said user having said user ID by using stored characteristic **information**, and of selecting and **recommending** only the

contents not recommended to said user having said user ID or the contents... ..36th invention of the present invention (corresponding to claim 36) is a program, in an **information recommendation** apparatus according to 1st invention, for making a computer function as all or part of...37th invention of the present invention (corresponding to claim 37) is a program, in an **information recommendation** apparatus according to one of 2nd to 14th and 16th to 18th inventions, for making... ..38th invention of the present invention (corresponding to claim 38) is a program, in an **information recommendation** apparatus according to 15th invention, for making a computer function as all or part of... ..39th invention of the present invention (corresponding to claim 39) is a program, in an **information recommendation** apparatus according to 23rd inventions, for making a computer function as all or part of...

...similar to said characteristic information to said user having said user ID by using characteristic **information**, and of selecting and **recommending** only the contents not recommended to said user having said user ID or the contents... ..coincident with the character string included in the input conditions may be selected from the **content** database and **recommended**.

As an embodiment, the present invention comprises network interface means connected to a terminal via the Internet to perform data communication, a content database for storing **information** to be **recommended**, **recommendation** condition input means of accepting the conditions of **information** desired to be **recommended**, **content recommendation** means of selecting contents conforming to recommendation conditions input from the **recommendation** condition input means, and **content** output means of outputting contents selected by the **content recommendation** means, wherein groups of the titles of contents and their objective and subjective characteristic amounts are **registered** as **content** data, and appropriate contents are **recommended** depending on the objective or subjective recommendation conditions from a user.

Furthermore, as an embodiment... ..to a terminal via the Internet to perform data communication, a content database for storing **information** to be **recommended**, user identification means of identifying a user who made access at the time of access from the terminal, access history control means of controlling the access history of the user, **content registration** means of accepting **registration** of new contents from the terminal, recommendation condition input means of accepting the conditions of **information** desired to be **recommended**, **content recommendation** means of selecting contents conforming to recommendation conditions input from the **recommendation** condition input means, and **content** output means of outputting contents selected by the **content recommendation** means, wherein

information is **recommended** depending on the **registration** results of **content** data of the user, thereby to urge the user to **register content** data.

Furthermore, as an embodiment, the present invention has a configuration wherein, as content data... ..relations between the state before the content data is selected and the state after the **content** data is selected are **registered** in the **content** database, and the state before the content data is selected or a state desired to be obtained after the content data is selected is input, thereby to **recommend content** data depending on the state before the content data is selected or the state desired... ..who generated the content data and items in view of a person who selects the **content** data are **registered** in the **content** database, and the viewpoint of the person who generates the content data or the viewpoint of the person who selects the **content** data is input, thereby to **recommend content** data depending on the viewpoint of the person who generates the content data and the... ..a configuration wherein items capable of being represented quantitatively are used as the conditions of **information** desired to be **recommended**, and the recommendation conditions are input by using a pointer or a slider capable of... ..two kinds of items capable of being represented quantitatively are used as the conditions of **information** desired to be **recommended**, and the quantitative values of the two kinds of recommendation conditions can be input at... ..to a terminal via the Internet to perform data communication, a content database for storing **information** to be **recommended**, user identification means of identifying a user who made access at the time of access from the terminal, access history control means of controlling the access history of the user,

content

registration means of accepting **registration** of new contents from the terminal, recommendation condition extraction means of extracting recommendation conditions from... ..previously by the user, recommendation condition input means of accepting recommendation conditions extracted by the **recommendation** condition extraction means, **content recommendation** means of selecting contents conforming to recommendation conditions input from the **recommendation** condition input means, and **content** output means of outputting contents selected by the **content recommendation** means, wherein **recommendation** conditions are extracted automatically from the data registered by the user, whereby the recommendation conditions are not required to be input at the time of **information recommendation**.

Furthermore, as an embodiment, the present invention comprises network interface means connected to a terminal via the Internet to perform data communication, a content database for storing **information** to be **recommended**, **recommendation** condition input means of accepting the conditions of **information** desired to be **recommended**, **content recommendation** means of selecting contents conforming to recommendation conditions input from the **recommendation** condition input means, **content** output means of outputting contents selected by the **content recommendation** means, and an advertisement database for providing advertisement data, wherein, when **recommended information** is given to a user, an advertisement related thereto is displayed simultaneously, and the number... ..and received by using a WWW browser or electronic mail to exchange data between an **information recommendation** apparatus and the terminals of users via the Internet used as a medium. Hence, the **recommendation of information** can be received by terminals, such as personal computers, portable information terminals and portable telephones... ..the Internet to perform data communication, recommendation condition input means of accepting the conditions of **information** desired to be **recommended**, a **content** database for storing **information** to be **recommended**, user identification means of identifying a user who made access at the time of access from the terminal, access history control means of controlling the access history of the user, **content registration** means of accepting **registration** of new contents from the terminal, user characteristic information calculation means of extracting the tendencies... ..user, user characteristic information database in which user characteristic information extracted by the user characteristic **information** calculation means is **registered**, similar user selection means of selecting users having similar tendencies of favorite contents in comparison with user characteristic **information**, **content recommendation** means of selecting contents conforming to recommendation

conditions input from the **recommendation** condition input means, and **content** output means of outputting contents selected by the **content recommendation** means, wherein, when the **recommendation** of **content** data is requested, the tendencies of favorite contents of the user are extracted from the characteristic amounts of **content** data **registered** or selected previously by the user, the tendencies are compared between users, users similar to the user are selected, and **content** data is **recommended** depending on **recommendation** conditions designated by the user from among **content** data **registered** previously by the selected similar users, whereby the favorite contents of users having similar preferences... ..as an embodiment, the present invention has a configuration wherein, by inputting the title of **content** data **registered** in the **content** database or by inputting a part of a character string constituting a characteristic amount for characterizing the **content** data as a **recommendation** condition, **content** data, the title of which or a part of a character string constituting a characteristic amount of which is partially coincident with the **recommendation** condition, is **recommended** as **content** data to be **recommended**, whereby various contents related to or derived from a certain **content** are **recommended**.

Furthermore, as an embodiment, the present invention has a configuration wherein one set of content... ..of at least two or more contents, many content records formed as described above are **registered** in a **content** database, a title is input as a **recommendation** condition, sets of **content** records including the **content** input as the **recommendation** condition are first selected as **content** data to be **recommended**, contents not conforming to the recommendation condition are output as contents to be recommended from... ..records, whereby contents suited to be used as a set when combined with a certain **content** are **recommended**.

Furthermore, as an embodiment, the present invention comprises network interface means connected to a terminal... ..the Internet to perform data communication, recommendation condition input means of accepting the conditions of **information** desired to be **recommended**, a **content** database for storing **information** to be **recommended**, user identification means of identifying a user who made access at the time of access from the terminal, access history control means of controlling the access history of the user, **content registration** means of accepting **registration** of new contents from the terminal, type information characteristic information calculation means of extracting the... ..the user, type information database in which type information obtained by calculation by the type **information** calculation means is **registered**, type **information** selection means of selecting a type having similar tendencies of favorite contents of the user in comparison with type **information**, **content recommendation** means of selecting contents conforming to recommendation conditions input from the **recommendation** condition input means, and **content** output means of outputting contents and type **information** selected by the **content recommendation** means, wherein, when the **recommendation** of **content** data is requested, the tendencies of favorite contents of the user are extracted from the characteristic amounts of **content** data **registered** or selected previously by the user, the tendencies of favorite contents of the user conforming... ..compared with type information, type information similar to that of the user is selected, and **content** data depending on **recommendation** conditions designated by the user is **recommended**, and type **information** is displayed, whereby type information, which corresponds to the user and on which **information recommendation** is based, is displayed at the time of **information recommendation**.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a view showing a system configuration in accordance with Embodiment 1 of the present invention;

FIG. 2 is a flowchart showing **information recommendation** operation in accordance with Embodiment 1 of the present invention;

FIG. 3 is a view... ..accordance with Embodiment 1 of the present invention;

FIG. 4 is a flowchart showing specific **information recommendation** operation in accordance with Embodiment 1 of the present invention;

FIG. 5 is a view... ..in accordance with Embodiment 2 of the present invention;

FIG. 7 is a flowchart showing **information recommendation** operation in accordance with Embodiment 2 of the present invention;

FIG. 8 is a view the present invention;

FIG. 21 is a flowchart showing **information recommendation** operation in accordance with Embodiment 5 of the present invention;

FIG. 22 is a view... ..in accordance with Embodiment 6 of the present invention;

FIG. 23 is a flowchart showing **information recommendation** operation in accordance with Embodiment 6 of the present invention;

FIG. 24 is a view.....in accordance with Embodiment 7 of the present invention;

FIG. 25 is a flowchart showing **information recommendation** operation in accordance with Embodiment 7 of the present invention;

FIG. 26 is a view... ..in accordance with Embodiment 8 of the present invention;

FIG. 28 is a flowchart showing **information recommendation** operation in accordance with Embodiment 8 of the present invention;

FIG. 29 is a view... ..accordance with Embodiment 8 of the present invention;

Reference numerals

1 network interface means

2 **content** database

3 **recommendation** condition input means

4 **content recommendation** means

5 **content** output means

6 user identification means

7 access history control means

8 **content registration** means

9 **recommendation** condition extraction means

10 advertisement database

11 similar user selection means

12 user characteristic information... ..16 type information database

100 terminal

200 advertisement

210 slider

220 pointer

500 Internet

1000 **information recommendation** apparatus

DETAILED DESCRIPTION OF THE INVENTION

Embodiments in accordance with the present invention will be... ..will be described below.

FIG. 1 is a view showing the system configuration of an **information recommendation** apparatus 1000 in accordance with Embodiment 1 of the present invention. In FIG. 1, numeral... ..a terminal 100 via the Internet 500 to perform data communication, numeral 2 designates a **content** database for storing **recommended information**, numeral 3 designates **recommendation** condition input means of accepting the conditions of **information** desired to be **recommended**, numeral 4 designates **content recommendation** means of selecting contents conforming to the recommendation conditions input from the recommendation condition input means 3, and numeral 5 designates content output means of outputting contents selected by the **content recommendation** means 4.

Furthermore, since a hardware configuration by which the system configured as described above... ..general-purpose computer system, the explanation of the configuration is omitted.

The operation of the **information recommendation** apparatus 1000 operating by using the system configured as described above will be explained below... ..transmitted via the Internet 500 and received by the network interface means 1 of the

information recommendation apparatus 1000.

For example, when an item "ingredients" and its attribute values "beef, carrot and... ..are input as recommendation conditions by using the terminal 100, they are transmitted to the **information recommendation** apparatus 1000 and input to the recommendation condition input means 3. The item and the... ..A1 are selected from the content database 2.

Data of recipes for dishes has been **registered** as **content** data in the **content** database 2. A specific example of recipe data is shown in FIG. 3.

In FIG... ..values corresponding to the items respectively may be represented by numeral values.

Abundant pieces of **recipe** data are **registered** in the **content** database 2 in the above-mentioned format. The **content recommendation** means 4 compares the **recommendation** conditions input at step A1 with the attribute values of the recipe data, and selects... ..are displayed on a WWW browser as shown in FIG. 15. When all pieces of **recommended content** data cannot be displayed once, they can be seen by scrolling the display of the... ..From the content database 2, one of the contents is selected.

(Step A22)

The selected **content** data has been **registered** in a format indicated in FIG. 3.

The attribute values "beef, carrot and onion" corresponding... ..confirmation is made as to whether contents not yet provided with evaluation values for the **recommendation** conditions are present in the **content** database 2 or not. If such data is present, the processing sequence returns to step... ..By taking the above-mentioned procedure, it is possible to select data conforming to the **recommendation** conditions from among all of **content** data in the content database 2 and to display the data.

A scoring method has... ..that the attribute corresponding to the item is 30 minutes.

In this case, as a **recommended content** selection method, without counting the number of coincident attribute values in the content data at... ..from the scoring method for the above-mentioned item "ingredients."

Furthermore, in the above example, **information recommendation** is performed on the basis of objective characteristic amounts. However, **information recommendation** may be performed on the basis of subjective

characteristic amounts. For example, "the grade of...accordance with the same method wherein contents represent subjective characteristics.

In this case, as a **recommended content** selection method, without counting the number of coincident attribute values at step A22 of FIG...order.

With the above-mentioned system configuration and operation, it is possible to accomplish an **information recommendation** apparatus capable of **recommending** data conforming to the request of the user from among content data stored in the content database 2. By providing content data having subjective characteristic amounts as attributes in particular, **information recommendation** can be carried out according to subjective or sensitive recommendation conditions, such as "easy-cooking... ..input an item and an attribute value corresponding thereto as one set. However, when the **information recommendation** apparatus of this embodiment performs processing internally, an item and an attribute value corresponding thereto... ..of this embodiment is an example of condition input means of the present invention. The **content recommendation** means 4 of this embodiment is an example of recommendation means of the present invention... ..invention will be described.

FIG. 5 is a view showing the system configuration of an **information recommendation** apparatus 1000 in accordance with Embodiment 2 of the present invention.

The configuration shown in... ..5 is obtained by adding user identification means 6, access history control means 7 and **content registration** means 8 to the system configuration of Embodiment 1 shown in FIG. 1.

In FIG. 5, numeral 1 designates network interface means, numeral 2 designates a **content** database, numeral 3 designates **recommendation** condition input means, numeral 4 designates **content recommendation** means, numeral 5 designates **content** output means, numeral 6 designates the user identification means of identifying a user who made... ..control means of controlling the access history of the user, and numeral 8 designates the **content registration** means of accepting **registration** of new contents from the terminal.

Furthermore, since a hardware configuration by which the system... ..general-purpose computer system, the explanation of the configuration is omitted.

The operation of the **information recommendation** apparatus 1000 operating by using the system configured as described above will be explained below.

In this Embodiment, first, the user must **register content** data before the user receives **recommendation of information**.

A **content** data **registration** procedure will be described below referring to a flowchart shown in FIG. 6.

(Steps B1 and B2)

When the user gains access to the **information recommendation** apparatus 1000 to **register** contents by using the terminal 100, the user identification means 6 requests the user to... ..the user has no user ID, it is judged that the user is using the **information recommendation** apparatus for the first time, and a user ID is issued to the user at... ..input both the user ID and the password at step B1.

(Step B3)

The user **registers content** data. In the case of a recipe for a dish, the user enters the attribute... ..user presses a "registration" button or the like displayed on the WWW browser, whereby the **content registration** means 8 **registers** the **content** data as new **content** data in the content database 2. At this time, the content data is endowed with a data ID.

(Step B4)

When the **content** data is **registered** at step B3, for the user having the currently registered user ID, the access history control means 7 renews and stores information, such as the date of **content** data **registration**, the data ID of the registered data and the quantity of the contents registered by the user.

(Step B5)

It is confirmed as to whether the user **registers** additional new **content** data or not. When **registration** is continued, the processing sequence returns to step B3. When registration is stopped, the sequential **registration** processing ends.

The user **registers content** data as described above. By **registering content** data, the quantity of **content** data **registered** in the **content** database 2 increases, and the history of user registration is renewed at the same time.

As entry items at the time when the user **registers content** data, various items other than those shown in FIG. 3 can be designated. For example... ..the person who took the dish.

Next, an operation by which the user receives the **recommendation** of **information** will be described below referring to a flowchart shown in FIG. 7.

(Step C1)

When the user gains access to the **information recommendation** apparatus to receive the **recommendation** of **information** by using the terminal 100, the user identification means 6 requests the user to input... ..her user ID. If the user has no user ID, the user cannot use the **recommendation** of **information**, and the processing sequence ends. When the user ID is input and it is judged... ..a judgment is made as to whether the user has satisfied a condition for receiving **recommended information**. The judgment is made by the access history control means 7 depending on the history as to the number of **content** data **registered** by the user so far and as to the number of times the user received the **recommendation** of **information** so far. For example, it is assumed that a rule wherein the user can receive the **recommendation** of **information** five times each time the user **registers** a piece of **content** data has been determined beforehand. In this case, when two pieces of **content** data have been **registered** according to the user's access history in the access history control means 7, the user has a right to receive the **recommendation** of **information** ten times. Hence, if the number of **information recommendation** times is nine or less, the user satisfies the condition for receiving the **recommendation** of **information**, and the processing sequence advances to step C3. If the number of **information recommendation** times is ten or more, the processing sequence ends.

(Steps C3 to C5)

When the user satisfies the condition for receiving the **recommendation** of **information** at step C2, the system accepts a recommendation condition from the user, selects **recommended information** from the **content** database 2, and displays the information on the terminal of the user. These procedures are... ..are not limited to the items indicated in FIG. 3. All objective and subjective items **registered** together with **recipe** data can be used as conditions. Hence, all the items exemplified in the explanation of **recipe registration** can be used as **recommendation** conditions.

Furthermore, at the time of inputting quantitative recommendation condition items, the user can easily... ..satisfactory) for the user should be recommended as a matter of course.

(Step C6)

When **information** is **recommended** at step C5, the access history control means 7 renews and stores information for the current user, such as the date when the **recommendation** of **information** is received, the data ID of **recommended information** and the number of **information recommendation** times.

With the above-mentioned system configuration and operation, it is possible to accomplish an **information recommendation** apparatus wherein **content** data stored in the content database 2 can be made complete and data

conforming to... ..the user is asked to enter objective items and subjective items at the time of **content registration**. Hence, the user can designate the conditions of registered contents by using the objective items... ..contents.

Furthermore, the user is asked to enter subjective evaluation items at the time of **content registration**. Hence, the relative merits of the registered contents can be determined. By considering this matter at the time of

content recommendation, contents having higher merits can be recommended.

Furthermore, the user is asked to enter items regarding cause-effect relations before and after eating at the time of **content registration**. Hence, the user can designate conditions in view of cause-effect relations of a meal...registration items that can be made quantitative.

In this embodiment, as a condition of receiving **recommended information**, **information recommendation** can be received five times for one piece of content data. However, the present invention... ..For example, to attract attention of the user, the condition may be set so that **recommended information** can be obtained for the first two times even when no **content** data has been **registered**.

Furthermore, in this embodiment, a judgment is made as to whether the user has satisfied a condition for receiving **recommended information**. This judgment is made by the access history control means 7 depending on the history as to the number of **content** data **registered** by the user so far and as to the number of times the user received the **recommendation** of **information** so far. However, the present invention is not limited to this. Content data may be endowed with the user ID of a person who **registered** the **content** data, and the judgment may be made by using the user ID.

(Embodiment 3)

Next... ..will be described below.

FIG. 8 is a view showing the system configuration of an **information recommendation** apparatus 1000 in accordance with this embodiment.

The configuration shown in FIG. 8 is obtained... ..FIG. 5.

In FIG. 8, numeral 1 designates network interface means, numeral 2 designates a **content** database, numeral 3 designates **recommendation** condition input means, numeral 4 designates **content recommendation** means, numeral 5 designates **content** output means, numeral 6 designates user identification means, numeral 7 designates access history control means, and numeral 8 designates **content registration** means, and numeral 9 designates the recommendation condition extraction means of extracting **recommendation** conditions from **content** items and attribute values **registered** previously by the user.

Furthermore, since a hardware configuration by which the system configured as... ..general-purpose computer system, the explanation of the configuration is omitted.

The operation of the **information recommendation** apparatus operating by using the system configured as described above will be explained below. In... ..just as in the case of Embodiment 1.

In this Embodiment, first, the user must **register content** data before the user receives the **recommendation** of **information** just as in the case of Embodiment 2.

Since the **content** data **registration** procedure in accordance with this embodiment is similar to that in accordance with Embodiment 2... ..in FIG. 6, its explanation is omitted.

Next, an operation for the user to receive **information recommendation** will be described below referring to a flowchart shown in FIG. 9.

(Steps D1 and D2)

When the user issues a request for **information recommendation** to the **information recommendation** apparatus by using the terminal 100, a check is made as to whether conditions for having the approval of the user ID and for receiving **recommended information** have been satisfied or not by the user identification means 6. In this embodiment, it is essential that the user who wishes to receive **recommended information** must **register content** data beforehand. If the conditions are not satisfied, the processing ends. The operations at steps... ..and C2 in FIG. 7.

(Step D3)

Next, the recommendation condition extraction means 9 extracts **recommendation** conditions from the **content** data **registered** previously by the current user. The access history control means 7 has information indicating the kind of **content** data **registered** in the past by the user. Therefore, to extract the **recommendation** conditions, the ID of the **content** data **registered** previously in the **content** database 2 by the user is read from the access history control means 7, and... ..cooked by the user can be known by obtaining statistics on the ingredients in the **content** data **registered** by the user, that is, by obtaining the occurrence frequencies thereof.

The data in a... ..the ingredients "pork, onion, cabbage, ..." are selected as recommendation conditions.

When the current user selects **content** data **registered** previously by the user, in accordance with the data ID of the data registered by method wherein a registrant ID is assigned to **content** data at the time of **registration**, and data having the registrant ID coincident with the user ID of the current user is selected from among **content** data **registered** in the **content** database 2.

(Step D4 to D5)

Recommended information is selected from the **content** database 2 in accordance with the recommendation conditions extracted at step D3, and is displayed... ..are similar to those at steps A2 to A3 in FIG. 2.

(Step D6)

When **information** is **recommended** at step D5, the access history control means 7 renews and stores information on the current user, such as the date when **information recommendation** is received, the data ID of the **recommended information** and the number of times the user received **information recommendation**.

In this embodiment, when extracting recommendation conditions at step D3, the extraction is performed in... ..whereby the recommendation conditions based on them may be extracted.

Furthermore, each piece of data **registered** in the **content** database 2 may be endowed with a content characteristic vector beforehand according to the occurrence... ..vector and the user characteristic information regarding the user may be obtained from the past **registration content** data of the user as described already, whereby **information** to be **recommended** may be determined according to **content** information having high inner products.

Furthermore, when generating user characteristic **information**, the **information** of contents **recommended** to the user and selected by the user in the past may be also included in addition to the contents registered in the past by the user. Alternatively, the **information** of the contents **recommended** to the user in the past may also be considered.

Furthermore, the system configuration may... ..result is stored. When the user characteristic information is required at the time when receiving **information recommendation**, the user characteristic **information** database 12 may be referred to.

These may be combined and the recommendation conditions based... ..when the user specifies "beef," only the contents including beef may be selected from the **content** database 2, and **recommendation** may be performed further from among the selected contents by the selection method using the... ..already.

With the above-mentioned system configuration and operation, it is possible to accomplish an **information recommendation** apparatus wherein **content** data stored in the content database 2 can be made complete and appropriate data suited... ..not cooked usually by the user be recommended, whereby it is possible to perform unexpected **information recommendation**.

Whether **recommendation** conditions for reasonable recommendation or recommendation conditions for unexpected recommendation are extracted depends on the... ..system may be configured so as to allow the user to select a viewpoint regarding **information recommendation**.

For example, at the time of requesting **information recommendation**, the user himself or herself is allowed to select "reasonable recommendation" or "unexpected recommendation." Depending...registered by the user.

For example, it is assumed that a user has carried out **content registration** 10 times so far, and that the average of cooking time is 60 minutes, the... ..set at 90 minutes.

Furthermore, it is assumed that another user has ever carried out **content registration** 20 times so far, and that the average of cooking time is 90 minutes, the... ..It is explained that the center value of each axis is the average of a **registered content**. However, the most frequent value may be used instead of the average.

The recommendation condition... ..4 will be described.

FIG. 12 is a view showing the system configuration of an **information recommendation** apparatus in accordance with Embodiment 4.

The configuration shown in FIG. 12 is obtained by... ..FIG. 1.

In FIG. 12, numeral 1 designates network interface means, numeral 2 designates a **content** database, numeral 3 designates **recommendation** condition input means, numeral 4 designates **content recommendation** means, numeral 5 designates **content** output means, and numeral 10 designates advertisement database for providing advertisement data.

Furthermore, since a... ..general-purpose computer system, the explanation of the configuration is omitted.

The operation of the **information recommendation** apparatus operating by using the system configured as described above will be explained below. In... ..the attribute values corresponding thereto, are transmitted via the Internet 500 and received by the **information recommendation** apparatus. This step is the same as step A1 in FIG. 2 in FIG. 2... ..The contents conforming to the recommendation conditions received at step E1 are selected from the **content** database 2 by the **content recommendation** means 4. This step is also the same as step A2 in FIG. 2. The... ..of selecting specific contents is similar to that described at the step.

(Step E3)

The **content recommendation** means 4 selects advertisement data conforming to the recommendation conditions input at step E1 from... ..counter" designates a value indicating the number of times this advertisement is transmitted together with **recommended information** to the terminal 100, "advertisement" designates the content of the advertisement, and "related information" designates... ..the highest evaluation value is then selected.

(Step E4)

Regarding the selected advertisement data, the **content recommendation** means 4 increments the value of "counter," shown in FIG. 14, by one.

(Step E5...related retail stores, information on related WEB sites, etc.

As a method of selecting advertisement **information**, regardless of **recommendation** conditions, selection may be carried out on the basis of user characteristic information by comparing... ..related information." Alternatively, selection may be carried out in consideration of both the user characteristic **information** and **recommendation** conditions.

With the above-mentioned system configuration and operation, **content** data conforming to the **recommendation** conditions can be recommended, and an advertisement corresponding to the data can be shown. In... ..to various contents.

In the above-mentioned Embodiment 1 to Embodiment 4, the request of **information recommendation**, the input of **recommendation** conditions, the **registration** of new **content** data, the display of **recommended content** data, etc. are explained by taking examples using a WWW browser. However, the present invention... ..electronic mail, may be used to transmit such information between the terminal 100 and the **information recommendation** apparatus 1000.

The **content recommendation** means 4 of this embodiment is used as an example of the advertisement specifying means... ..5 will be described.

FIG. 19 is a view showing the system configuration of an **information recommendation** apparatus in accordance with Embodiment 5.

The configuration shown in FIG. 19 is obtained by... ..FIG. 5.

In FIG. 19, numeral 1 designates network interface means, numeral 2 designates a **content** database, numeral 3 designates **recommendation** condition input means, numeral 4 designates **content recommendation** means, numeral 5 designates **content** output means, numeral 6 designates user identification means, numeral 7 designates access history control means, numeral 8 designates **content registration** means, numeral 13 designates user characteristic information calculation means of obtaining user characteristic information indicating... ..user selection means 11 of selecting other users similar to the user attempting to receive **information recommendation**.

Furthermore, since a hardware configuration by which the system configured as described above is operated... ..general-purpose computer system, the explanation of the configuration is omitted.

The operation of the **information recommendation** apparatus operating by using the system configured as described above will be explained below. In... ..just as in the case of Embodiment 1.

In this Embodiment, first, the user must **register content** data before the user receives the **recommendation of information** just as in the case of Embodiment 2.

The **content** data **registration** procedure in accordance with this embodiment is similar to that in accordance with Embodiment 2... ..access history is renewed at step B4. At step B4-2, by referring to the **content** data **registered** by the user so far from the content database 2, the user characteristic **information** is renewed and **registered** in the user characteristic **information** database 12.

The method of specifically generating and renewing the user characteristic information is the... ..For example, only the data registered by the user is selected from among the data **registered** in the **content** database 2. The names of the ingredients occurred in the registered data and the frequencies... ..normalized. As a result, the format shown in FIG. 10 is obtained.

The user characteristic **information** additionally including newly **registered content** data is renewed by a similar procedure.

By the above-mentioned procedure, the **content** data is **registered**, and the user characteristic **information** is also generated and renewed simultaneously.

The generation and renewal of the user characteristic information are not necessarily required to be carried out at the time of the **registration** of the **content** data. When the **content** data is **registered**, the **registration** may be carried out according to the procedure shown in FIG. 6, and when the load on the **information recommendation** system is relatively low, the renewal operation of the user characteristic information, that is, only... ..in FIG.20, may be carried out.

Next, an operation for the user to receive **information recommendation** will be described below referring to a flowchart shown in FIG. 21.

(Steps F1 and F2)

When the user issues a request for **information recommendation** to the **information recommendation** apparatus by using the terminal 100, a check is made as to whether conditions for having approval of the user ID and for receiving **recommended information** have been satisfied or not. In this embodiment, it is essential that the user who wishes to receive **recommended information** must **register content** data beforehand. If the conditions are not satisfied, the processing ends.

If the conditions for receiving **information recommendation** are satisfied at step F2, the recommendation conditions are accepted from the user. This operation... ..one or more other users are selected.

(Step F5)

Among all content data in the **content** database, the data **registered** by the users selected at step F4 is selected depending on the recommendation conditions accepted... ..with content characteristic vectors, and a determination may be made by comparing the user characteristic **information** of the user who requested **recommendation** with the **content** characteristic vectors.

(Steps F6 and F7)

The **recommended information** determined at step F5 is displayed on the terminal of the user. The access history... ..means 7 renews and stores information on the current user, such as the date when **information recommendation** is received, the data ID of the **recommended information** and the number of times the user received **information recommendation**.

In this embodiment, the following selection method may be used. When **information** to be **recommended** is determined at step F5, a confirmation is made as to whether the user attempting to receive **recommendation** has ever received the **information** to be **recommended** and selected the **information** or not, by referring to the content database 2, whereby only the unselected content data... ..already in the explanation of Embodiment 2.

Furthermore, at the time of generating user characteristic **information**, in addition to using contents **registered** by the user in the past, it may be possible to consider **content** data **information recommended** to the user and selected by the user in the past. In other words, each time the user received the **recommendation** of **content** data and selected the **recommended content** data in the past, the user characteristic information of the user may have been obtained by calculation. Alternatively, it may be possible to consider **content** data **information recommended** to the user in the past. In other words, each time the user received **content recommendation** in the past, the user characteristic information of the user may have been obtained by... ..used.

With the above-mentioned system configuration and operation, it is possible to accomplish an **information recommendation** apparatus wherein **content** data stored in the content database 2 can be made complete and **content** data **registered** by users having similar preferences can be **recommended**.

The user characteristic **information** calculation means 13 of this embodiment is an example of characteristic calculation means of the... ..will be described below.

FIG. 22 is a view showing the system configuration of an **information recommendation** apparatus in accordance with Embodiment 6. This configuration is obtained by adding **content registration** means 8 to the system configuration of Embodiment 1.

The format of the data **registered** in the **content** database 2 is similar to that shown in FIG. 3.

Although Embodiment 6 is similar... ..example and described referring to a flowchart shown in FIG. 23.

(Preparation)

Abundant pieces of **content** data have been **registered** beforehand in the **content** database 2. By forming a configuration wherein many users can **register content** data through the terminal 100 by using the **content registration** means 8, abundant various **content** data can be collected easily.

(Step G1)

Recommendation conditions input by the user through the... ..transmitted via the Internet 500 and received by the network interface means 1 of the **information recommendation** apparatus 1000.

For example, when "curry" is input as a recommendation condition through the terminal are transmitted to the **information recommendation** apparatus 1000 and input to the recommendation condition input means 3.

(Step G2)

According to the recommendation condition received at step G1, the **content recommendation** means 4 selects data in which recipe names used as attribute values corresponding to the item "recipe" in the **content** database 2 include the **recommendation** condition.

For example, when the attribute values corresponding to the item "recipe" are "curry and... ..condition. These contents are selected. As described above, even the contents having attribute values including **content** data partially coincident with the **recommendation** condition can become objects to be selected.

(Step G3)

The contents (recipe data) selected at... ..contents obtained by applying the recommendation conditions or by deriving the recommendation conditions can be **recommended** from among all of **content** data in the content database 2.

In the case of recipes for dishes in particular... ..will be described below.

FIG. 22 is a view showing the system configuration of an **information recommendation** apparatus in accordance with Embodiment 7. This system configuration is the same as that of Embodiment 6.

The format of the data **registered** in the **content** database 2 is shown in FIG. 24. In FIG. 24, all items of the recipes... ..included.

As described above, Embodiment 7 can have new effects by changing the format of **content** data **registered** in the **content** database 2, by changing the **recommendation** condition acceptance method and by changing the search method. The operations in this embodiment will... ..example and described referring to a flowchart shown in FIG. 25.

(Preparation)

Abundant pieces of **content** data have been **registered** beforehand in the **content** database 2. By forming a configuration wherein many users can **register content** data through the terminal 100 by using the **content registration** means 8, abundant various **content** data can be collected easily.

(Step H1)

Recommendation conditions input by the user through the... ..transmitted via the Internet 500 and received by the network interface means 1 of the **information recommendation** apparatus 1000.

For example, when "hamburger" is input as a recommendation condition through the terminal... ..and "hamburger" is input as an attribute value corresponding thereto, these are transmitted to the **information recommendation** apparatus 1000, and input to the recommendation condition input means 3.

(Step H2)

According to the recommendation condition received at step H1, the **content recommendation** means 4 selects data in which one of recipe names in the **content** database 2 includes the **recommendation** condition.

For example, when **content** data includes a group of recipe names "curry and rice," "fruit salad," and "oolong tea... ..recommendation condition "hamburger" is included therein. Hence, the content data is selected.

(Step H3)

Next, **recipe** names different from the **recommendation** condition are selected from the group of recipe names in the content data selected at... ..them or both of them may be selected. Alternatively, all the recipe names including the **recipe** name used as the **recommendation** condition may be selected from the same group of recipe names.

(Step H4)

The recipe names the procedure described above, content data suited to be provided together with certain **content** data can be **recommended** from among all of **content** data in the content database 2.

Furthermore, the recipe names of dishes taken for a meal are described in a piece of **content** data **registered** in the **content** database 2. However, there is no setting of a main-and-subordinate relation among them... ..will be described below.

FIG. 26 is a view showing the system configuration of an **information recommendation** apparatus in accordance with Embodiment 8. This configuration is obtained by adding type information calculation means 15 of obtaining the **registered** user type **information** by calculation from the data **registered** in the **content** database 2, by adding a type information database 16 in which the user type information... ..configuration of Embodiment 2 shown in FIG. 5 comprises the network interface means 1, the **content** database 2, the **recommendation** condition input means 3, the **content recommendation** means 4, the **content** output means 5, the user identification means 6, the access history control means 7 and the **content registration** means 8.

Furthermore, since a hardware configuration by which the system configured as described above... ..on users conforming to a certain condition. For example, it is assumed that 1000 users **registered information** in the **content** database 2. Among the users, it is assumed that 500 users live in the Kanto... ..registered by the users living in the Kanto area is selected from among the data **registered** in the **content** database 2. The ingredient names occurring in the registered data and their occurrence frequencies are... ..the user classified by residential area.

In this embodiment, the user is first required to **register content** data before the user receives **information recommendation** just as in the case of Embodiment 2.

The procedure for **registering** the **content** data is similar to the **content** data **registration** procedure shown in FIG. 6 and described in the explanation of Embodiment 2.

FIG. 27... ..access history is renewed at step B4. At step B4-3, by referring to the **content** data **registered** by the user so far from the content database 2, the type information calculation means 15 renews the user type **information** and **registers** the **information** in the type **information** database 16.

The type information calculation method is as described before. The type **information** additionally including currently **registered information** is renewed.

By the above-mentioned procedure, the **content** data is **registered**, and the type **information** is also generated and renewed simultaneously.

The generation and renewal of the type information are not necessarily required to be carried out at the time of the **registration** of the **content** data. When the **content** data is **registered**, the **registration** may be carried out according to the procedure shown in FIG. 6, and when the load on the **information recommendation** system is relatively low, the renewal operation of the type information, that is, only the... ..in FIG. 27, may be carried out.

Next, an operation for the user to receive **information recommendation** will be described below referring to a flowchart shown in FIG. 28.

(Steps I1 to I3)

When the user issues a request for **information recommendation** to the **information recommendation** apparatus by using the terminal 100, a check is made as to whether conditions for having approval of the user ID and for receiving **recommended information** have been satisfied or not. In this embodiment, it is essential that the user who wishes to receive **recommended information** must **register content** data beforehand. If the conditions are not satisfied, the processing ends.

If the conditions for receiving **information recommendation** are satisfied at step I2, the recommendation conditions are accepted from the user. This operation... ..similar to that at steps C1 to C3 in FIG. 7.

(Step I4)

The contents **registered** in the **content** database 2 are selected on the recommendation conditions accepted at step I3. As a specific **recommended content** selection method, a procedure similar to that used at steps A21 to A24 shown in... ..with content characteristic vectors, and a determination may be made by comparing the user characteristic **information** of the user who requested **recommendation** with **content** characteristic vectors. The user characteristic information may be obtained dynamically from the **content** data that is **registered** by the user in the past in the content database 2. In addition, by using... ..having the user characteristic information database 12 (not shown), the characteristic vector of the user, **registered** in the user characteristic **information** database 12, may be referred to.

(Step I5)

Next, the type corresponding to the current... ..the type information on "company employee living in the Kansai area" is selected from the **information** on all the **registered** users.

(Steps I6 and I7)

The **recommended information** determined at step I4 and the type information determined at step 15 are displayed on... ..means 7 renews and stores information for the current user, such as the date when **information recommendation** is received, the data ID of the **recommended information** and the number of times the user received **information recommendation**.

FIG. 29 is a display example of a result of **information recommendation** at the terminal.

This indicates that the user corresponds to the type information on "company... ..configuration and operation, it is possible to indicate the type of the user together with **recommended content information**. In comparison with the

indication of only recommended contents, the indication of the type **information** together with **recommended** contents provides the preferences and selection characteristics of the user by using other ways of expression. Hence, the user can find his or her unintentional tendencies. As a result, the **information recommendation** system can be made more interesting and convenient.

In Embodiments 1 to 8, an example... ..the server apparatus.

As described above, in Embodiment 1, contents and attribute values have been **registered** in the **content** database 2. Hence, it is possible to accomplish an **information recommendation** apparatus capable of **recommending** data conforming to the request of the user from among content data having been stored... ..content database 2. By providing content data having subjective characteristic amounts as attributes in particular, **information recommendation** can be attained according to subjective or sensitive recommendation conditions, such as "easy-cooking dish," "light dish" and "enjoyable dish."

Furthermore, in Embodiment 2, **information recommendation** is limited depending on the registration results of contents. Hence, it is possible to accomplish an **information recommendation** apparatus wherein **content** data stored in the content database 2 can be made complete and data conforming to... ..recommended.

Furthermore, the user is asked to enter subjective evaluation items at the time of **content registration**. Hence, the relative merits of the registered contents can be determined. By considering this matter at the time of **content recommendation**, contents having higher merits can be recommended.

Furthermore, the user is asked to enter items regarding cause-effect relations before and after eating at the time of **content registration**. Hence, the user can designate conditions in view of cause-effect relations of a meal...input easy by using registration items that can be made quantitative.

Furthermore, in Embodiment 3, **information recommendation** is limited depending on the registration results of contents, and recommendation conditions are extracted from the contents registered by the user. Hence, it is possible to accomplish an **information recommendation** apparatus wherein appropriate data suited for the user can be recommended while the user is not required to input specific **recommendation** conditions.

Furthermore, in Embodiment 4, **content** data conforming to the **recommendation** conditions can be recommended, and an advertisement corresponding to the data can be shown. In... ..on the number of times.

Furthermore, in Embodiment 5, it is possible to accomplish an **information recommendation** apparatus wherein **content** data stored in the content database 2 can be made complete, users having similar preferences can be selected, and

content data **registered** by the users having can be recommended.

Furthermore, in Embodiment 6, it is possible to accomplish an **information recommendation** apparatus wherein contents obtained by applying the recommendation conditions or by deriving from the recommendation conditions can be **recommended** from among all of **content** data in the content database 2.

Furthermore, in Embodiment 7, it is possible to accomplish an **information recommendation** apparatus wherein **content** data suited to be provided together with certain **content** data can be **recommended** from among all of **content** data in the content database 2.

Furthermore, in Embodiment 8, it is possible to indicate the type of the user together with **recommended content information**. In comparison with the indication of only recommended contents, the indication of the type **information** together with **recommended** contents provides the preferences and selection characteristics of the user by using other ways of... ..find his or her unintentional tendencies. As a result, it is possible to accomplish an **information recommendation** apparatus being more interesting and convenient.

The program of the present invention operates together with... ..the functions of all or some means (apparatuses, devices, circuits, etc.) of the above-mentioned **information recommendation** apparatus of the present invention.

Some means (apparatuses, devices, circuits, etc.) of the present invention... ..order to accomplish information service using an information server, the present invention can provide an **information recommendation** apparatus, an **information recommendation** system and a program capable of preparing abundant contents.

Furthermore, the present invention can provide an **information recommendation** apparatus, an **information recommendation** system and a program capable of recovering maintenance cost for constructing and maintaining a large database.

Furthermore, the present invention can provide an **information recommendation** apparatus, an **information recommendation** system and a program capable of easily finding out information that is exactly suited for a user but unnoticed.

Furthermore, the present invention can provide an **information recommendation** apparatus, an **information recommendation** system and a program capable of providing recipes suited for actual daily menus for family.

Furthermore, the present invention can provide an **information recommendation** apparatus, an **information recommendation** system and a program capable of providing recipes not void of viewpoints obtained by the...

9/K/7 (Item 7 from file: 348)
EUROPEAN PATENTS
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Inventor:

- ...JP)
 ;;
- Kutsumi, Hiroshi
 ;;

| Country | Number | Kind | Date | | |
|----------------------------------|--------|-----------|------|--------|------------|
| Type | | Pub. Date | | Kind | Text |
| Available Text | | Language | | Update | Word Count |
| Total Word Count (Document A) | | | | | |
| Total Word Count (Document B) | | | | | |
| Total Word Count (All Documents) | | | | | |

Specification: ...in the system of FIG. 1.

FIG. 25 is an exemplary illustration of a Web **registration information** card output from the terminal in the system of FIG. 1.

FIG. 26 is an...ID and the password. It should be noted that the illustrated GUIs and the Web **registration information** card shown in FIG. 25 are mere examples. For these GUIs and cards, other designs...

9/K/8 (Item 1 from file: 347)

JAPIO

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**INFORMATION RECOMMENDATION DEVICE, INFORMATION RECOMMENDATION METHOD
AND PROGRAM**

**Inventor: KUTSUMI HIROSHI
NAITO EIICHI**

ABSTRACT

PROBLEM TO BE SOLVED: To provide an information recommendation device properly learning taste of a user from a browsing history of information to recommend information with high accuracy.

SOLUTION: This information recommendation device has: information designation part wherein the user designates the information to be browsed; an information acquisition part... ..update part updating user profile according to the reason selected by the user; and a recommendation information selection part selecting the recommended information on the basis of the user profile.

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9/K/9 (Item 2 from file: 347)

JAPIO

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**Inventor: KATO AI
ARAKI SADAFUMI**

ABSTRACT

...between a schedule and an actual behavior with respect to a scheduler.

SOLUTION: A schedule **information** storage part 32 **registers** a schedule associating either a place for work or work contents of the work with... ..a contradiction determination part 33 determines whether or not there is contradiction between the input **information** and **registration information** of the schedule **information** storage part 32. When it is determined to be contradictory, a contradiction resolution part 51...

9/K/10 (Item 3 from file: 347)

JAPIO

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**Inventor: ARAKI SADAFUMI
KATO AI**

ABSTRACT

...is a discrepancy between them in the discrepancy judging part (step S2). In the judgement, **registered information** of a discrepancy judgement related setting information storing part 33 is also used.

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9/K/11 (Item 4 from file: 347)

JAPIO

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Inventor: ARAKI SEIICHI

ABSTRACT

...a visitor at the entrance of the museum in function limiting processing. The read status **information** is transmitted to a charging **registration** server. The charging **registration** server refers to management **information** of the digital photographing device from the received-status information. When it is determined that...

9/K/12 (Item 5 from file: 347)

JAPIO

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Inventor: ARAKI SHOKEN
OSHIMA YASUHISA
NAGAI TOSHIO

ABSTRACT

...to a center device 5 via the mobile phone network 4. The center device 5 **registers** the location **information** in the database device 6. Likewise, the location information of the relay unit 2 and...

9/K/13 (Item 6 from file: 347)

JAPIO

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Inventor: OZAWA JUN
YOSHIDA HIDEYUKI
NAITO EIICHI
KUTSUMI HIROSHI

ABSTRACT

PROBLEM TO BE SOLVED: To provide an information providing device capable of providing a **recommended content** precisely reflecting a user's interest independently from a terminal operated or browsed by the... ..plurality of contents associated with two or more different kinds of terminals 14, respectively; a **content information** selection part 131 selecting **recommendation content** description **information** and providing **content** description information from the content description **information** 111-113; a **content information recommendation** part 132 determining a **content** to be **recommended** to the user based on the **recommendation content** description **information**; and a **recommended content** providing part 133 specifying **information** for the determined

recommended content from the providing **content** description information and delivering it to the terminal 14 of the user.

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9/K/14 (Item 7 from file: 347)

JAPIO

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Inventor: ARAKI SATOSHI

ABSTRACT

...a recording medium owned by a user, and to provide a service based on the **content registered**.

SOLUTION: When a CD(compact disk), owned by a user, is inserted into an EMD terminal 3, an **information registering** part 33 of the EMD terminal 3 reads title **information** described in the CD, and **registers** it in a customer **information** database 6. Upon receiving the purchase request of music contents from the EMD terminal 3... ..server 4. When the title information of the CD owned by the user has been **registered** in the customer **information** database 6, the settlement processing server 4 calculates the discount price of the music contents...

9/K/15 (Item 8 from file: 347)

JAPIO

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Inventor: MIYAZAWA TOSHIO

SEKIGUCHI MASARU

YAMAGATA HIDEAKI

SAITO TAKASHI

SUZUKI TOSHIHIRO

ARAKI SADAFUMI

YAMAAI TOSHIFUMI

ABE TEI

INOUE KOICHI

ABSTRACT

...data storage means 7 for storing information for date, place, and participants which are preliminarily **registered** by a user; an **information** device (PC) 9 connected onto the network 1; a printer 4 for printing the schedule...

9/K/16 (Item 9 from file: 347)

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CONTENT RECOMMENDATION SYSTEM, CONTENT RECOMMENDATION DEVICE, CONTENT RECOMMENDATION METHOD, PROGRAM THEREFOR, AND PROGRAM STORAGE MEDIUM THEREFOR

Inventor: NAITO EIICHI

OZAWA JUN

9/K/17 (Item 10 from file: 347)

JAPIO

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Inventor: ARAKI SEI

YAMAMOTO SHIGEO

HORIKAWA HARUMI

KAWADA SATOSHI

MARUTA KAYOKO

OKADA MASUMITSU

MURATA KENICHI

TAKEMOTO MASAYO

ABSTRACT

...my-page which is user's individual WWW page. It is provided with a commodity **registration** part 110 for obtaining **information** of commodity purchased by the user, a link generation part 112 for generating a link...

9/K/18 (Item 11 from file: 347)

JAPIO

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Inventor: KUTSUMI HIROSHI

MATSUURA SATOSHI

KUDO TAKAHIRO

KIHARA NAOMI

ISHIHARA YUICHI

ABSTRACT

...the Internet.

SOLUTION: The system is provided with merchandise information data base 1, a merchandise **information registering** means 2 that **registers** merchandise **information**, a merchandise evaluation **information registering** means 3 that **registers** merchandise evaluation **information**, a merchandise **information** display means 4 that reads the merchandise information and the merchandise evaluation information and generates... ..on a terminal through the Internet, etc., an evaluator information data base 5, an evaluator **information registering** means 6 that **registers** evaluator **information**, an evaluator evaluation **information registering** means 7 that **registers** evaluation **information** regarding the evaluator and an evaluator information display means 8 that generates the data to...

9/K/19 (Item 12 from file: 347)

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SYSTEM, METHOD AND PROGRAM FOR RECOMMENDING INFORMATION, AND RECORDING MEDIUM HAVING THE PROGRAM RECORDED THEREON

Inventor: NAITO EIICHI

**KUTSUMI HIROSHI
ARAKI SHOICHI**

9/K/20 (Item 13 from file: 347)

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DEVICE AND SYSTEM FOR RECOMMENDING INFORMATION

Inventor: KUTSUMI HIROSHI

ARAKI SHOICHI

NAITO EIICHI

HIRATSUKA TOMOYASU

JITOSHO HIROMI

ABSTRACT

...actual condition.

SOLUTION: A device is provided with a contents recommending means 4 selecting and recommending the content which is matched with a condition inputted by a recommended condition input means 3 inputting...

9/K/21 (Item 14 from file: 347)

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DATA ANALYZING METHOD, INFORMATION RETRIEVING METHOD, AND INFORMATION RECOMMENDING METHOD

Inventor: ARAKI SHOICHI

NAITO EIICHI

KUTSUMI HIROSHI

9/K/22 (Item 15 from file: 347)

JAPIO

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Inventor: MIYAHIRO EIICHI

ARAKI SHINICHIRO

YOSHIDA HIROSHI

ABSTRACT

...gender, address, occupation, and hobby, etc., of each user is not indispensable, and which can recommend an appropriate content for individual user without requiring advance classification of contents.

SOLUTION: A usage record device 24 records which content is used from user terminals 12-18. A content recommendation device 26, based on the usage record for each user, finds out contents used in... user-specific content groups, inclusive content groups in relation to every user are obtained. The content recommendation device 26, based on the user-specific content groups and the inclusive content groups, determines the recommended content for each user.

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9/K/23 (Item 16 from file: 347)

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INFORMATION RECOMMENDING METHOD

Inventor: ARAKI SHOICHI

NAITO EIICHI

KUTSUMI HIROSHI

MARUNO SUSUMU

ABSTRACT

PROBLEM TO BE SOLVED: To provide an information recommending method by which the defect of the conventional method can be corrected that the method... ..Of the matched results between a user profile and the keyword vector of information, the information having the higher degree of recommendation provided from an information introducer is presented to a user.

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9/K/24 (Item 17 from file: 347)

JAPIO

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Inventor: KUTSUMI HIROSHI

MATSUURA SATOSHI

MIURA YASUSHI

IMANAKA TAKESHI

ABSTRACT

PROBLEM TO BE SOLVED: To obtain the **information** transfer device that can **register information** to be transferred without the use of an external facsimile equipment by transferring an image...

9/K/25 (Item 18 from file: 347)

JAPIO

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INFORMATION DISPLAYING METHOD, INFORMATION REGISTERING METHOD AND THEIR DEVICE

Inventor: KUTSUMI HIROSHI
IMANAKA TAKESHI
YOSHIDA YASUSHI
NAITO EIICHIRO

9/K/26 (Item 19 from file: 347)

JAPIO

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Inventor: KUTSUMI HIROSHI
IMANAKA TAKESHI

ABSTRACT

...a program name, the date and time of broadcasting, a channel, a genre and the **recommendation** degree **information** of a program corresponding to age classification and the sex received by a program information... ..and sex) from the menu items of the individual condition selection menu by an individual **information** input means 15, a **recommendation** degree management means 13 extracts the pertinent program information from the program information recording medium...

9/K/27 (Item 20 from file: 347)

JAPIO

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Inventor: ARAKI SOKICHI

ABSTRACT

...printing a list of form data while reducing thereby printing a list of the print **content**, title and hierarchic structure of **registered** form...

9/K/28 (Item 21 from file: 347)

JAPIO

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Inventor: ARAKI SHIROYUKI

ABSTRACT

...The data processing controller 3 requests a data processing execution controller 108 to execute the **registered** function together with **information** on character and graphic data to be processed, and the data processing execution controller 108...

9/K/29 (Item 22 from file: 347)

JAPIO

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Inventor: ARAKI SHIGEYUKI
SUZUKI MASATO

NISHIZAWA TATSUYUKI

ABSTRACT

...the above described function data with the time required for the data of the second **register** 18, and speed indicating **information** VD matching with the longer one of both times is set.

9/K/30 (Item 23 from file: 347)

JAPIO

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Inventor: ARAKI SHIGEYUKI

SUZUKI MASATO

NISHIZAWA TATSUYUKI

ABSTRACT

...a time level required for a type-selecting operation etc. is stored in the 1st **register** 17. The **content** of this 1st **register** 17 and the output VD of a flying-speed instructing circuit 21 are given to ...

9/K/31 (Item 24 from file: 347)

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Inventor: ARAKI SHIGEYUKI

SUZUKI MASATO

NISHIZAWA TATSUYUKI

ABSTRACT

...a time level required for a type- selecting operation etc. is stored in the 1st **register** 17. Based on the **content** of the 1st **register** 17 and the output of a flying-speed instructing circuit 21, i.e. the carriage... ...1st register 17, the level of the flying speed following the data of the 1st **register** 17 is selected. A speed **information** thus selected turns to be a new speed-instructing information VD for the carriage through...